Minnesota Amateur Radio Technical Society

http://www.mn-arts.org/

April 2015 Edition

From the President

Many exciting things are happening with MN-ARTS. As most of you know we changed our start time effective the March meeting to 1:00 PM to give us more time. I assumed some would not get the message, but we had a packed house by 1, and it was good that we had the extra hour because we still ran out of time. Thanks to everyone who continue to come and make this one of the best clubs.

We also had a very good turnout at Buffalo for Midwinter Madness. Passed out almost 100 flyers and many new faces came to the March meeting from contacts made that day. Thanks to everyone who showed up, brought projects to display at the table, and helped man the table. We always have a great turnout and interest in our club - who can resist some of those projects!

Also a reminder that dues for this year were due in March. If you still need to pay please contact our treasurer Paul, N0TYE. We will be updating the membership list on the web in May. Let us know if you have any questions.

Hope to see everyone at the May 2 meeting. Russ Ramirez, K0WFS, will be presenting on a mystery subject that you won't want to miss - or you can check on the website for more information.

73 de Chuck ka8hde

April Meeting Minutes

Chuck Stroud, KA8HDE, called the meeting to order at 1:00 PM. 33 were in attendance.

Introductions were made which included the year everyone was licensed.

Paul Bushouse, N0TYE, reports that there is 1922.51 in the account. Some bills need to be paid still.

Old Business:

- Name tags were available for those that ordered them.
- The recent Buffalo event was discussed and it was noted that this year's attendance was very good.

New Business:

- Field Day was discussed. Craig, AA0ZZ, was interested to learn what would make Field Day interesting for the group. Some of the ensuing discussion involved solar power, digital modes and SSB.

- Next week will be the first Amateur Radio in the park for the season. Those interested should visit: http://hamoperator.com/Park/2015/HamsinthePark.html

Show & Tell

Bob Liesenfeld, WB0POQ, demonstrated his CW program he wrote in VB.net. It was connected to a code oscillator via USB and an optical connection. Bob described the various issues he ran into with the program. He said he learned quite a bit about buffers and what goes on in the background.


John Krawczak, KJ0P, brought in a talking alarm clock he won at a recent Radio City event. He also brought in a straight key he picked up at the Buffalo event. It is similar to a J38 and he is quite pleased with it's operation.

Ted Kinnear, KD0NJP demonstrated the strength of a rope knot he recently learned which is useful for use with pipes. (see the write up at the end of the newsletter)


Craig Siegenthaler, W7BGO, brought in a small keyer he recently completed. Craig also showed us his finished 20 watt linear which is now nicely housed in a cabinet with a digital volt & amp meter. Craig reports good results with the design. The amplifier works 80 – 10 meters.
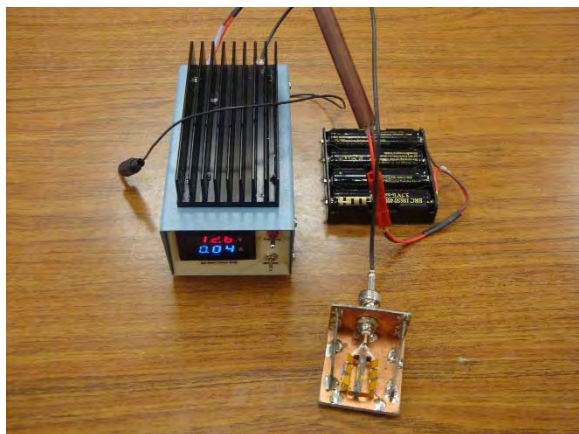
Doug Marsh, N8TUT, brought in recently acquired USB scope which also includes an audio generator. He demonstrated the set up for us. Doug reports that the BW is around 300 KHz and he got the device to learn more about this type of equipment. The software is open source and works with Linux, Mac and Windows.

John Hoaglun, NG0R, brought in some parts he recently made on his newly acquired 3D printer. John explained some the learning curve he experienced with this new machine along with the available software for programming the device. John then went on to discuss some of the different types of plastics that could be used along with their properties.
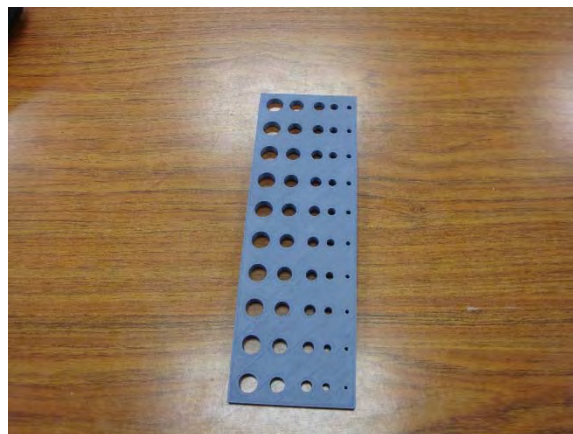
Clay Bartholow, W0LED, described the replacement Arduino based controller he was building for a Radio Shack rotor he picked up at the recent Buffalo event. In addition to being Arduino controlled it will be Wi-Fi capable.

Nagi P., N0AGI, brought in a recently constructed mobile unit built into a backpack frame. The unit has a Yaesu 857, a screwdriver antenna for HF and a VHF/UHF antenna. It has a Signal Link and Kantronic TNC for digital and APRS along with Bluetooth for computer control. The back of the frame has a 10 watt solar panel and the battery is a 20 Ah.

Steve Ulrich, NW0C, brought in a Hendricks kit variable attenuator. Steve reports that the kit is of good quality and that the resistors were 2 watt and high precision. He also brought in a digital audio recorder made by Tascam. The device provides a flat response from 20 – 22 KHz. Steve intends to use it for recording digitally encoded signals for identification purposes.

April Presentation

Steve Ulrich, NW0C, gave us a presentation on the amateur test bench. After some general comments, Steve focused on what the various specifications for DVM and Digital oscilloscopes meant. Steve pointed out which ones were important to pay attention to and why.

Respectfully submitted,
Steve, NW0C

Club Officers:

President:	*Chuck Stroud/KA8HDE*	*ka8hde79@gmail.com*
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Rope basics: Safety first!

- ✓ Every rope type has a maximum working strength.
- ✓ Knots will decrease the maximum working strength of a rope.
- ✓ Rope materials may be affected by the environment and its application.
- ✓ Ropes are subject to friction and may wear out, they should be inspected often or before each use.
- ✓ Rope materials may be slippery and could cause a knot to come undone.
    - Always dress / test a knot to ensure proper operation.
    - Use a stopper knot for additional safety.
- ✓ Practice the basic knots so that they become second nature.

Rope terms:

- Working end -
    - The shorter part of the rope where a knot or a bight is being tied in (sometimes referred to as the running end of the rope)
- Standing part (end) -
    - The other end of the rope that consists of the bulk of the rope (the end that is not being worked at the time).
- Bight -
    - A loop in the rope that contains two strands of rope which are parallel to one another and which stay parallel to one another throughout the course of a knot
- Loop -
    - Formed when the working end of the rope crosses over itself.

Links:

Knot basics:	www.animatedknots.com
Pipe Hitch:	www.youtube.com/watch?v=yuhVmDXpMNQ
Figure Eight Stopper Knot:	www.animatedknots.com/fig8_/index.php
Marlin Spike Hitch:	www.youtube.com/watch?v=jCX6_tGttKc

Figure Eight Stopper Knot:

Make a loop in the end of the line.

Cross the working end behind the Standing line.

Pass the working end through the loop.

Pipe Hitch

Make 5 wraps around the pole, away from the direction of the pulling force.

Cross over the wraps and add two half hitches.

Pull taut to set the knot before using.

Marlin Spike Hitch:

Make a loop in the line.

Fold the loop over the standing line.

Pull the standing end through the loop and insert spike.